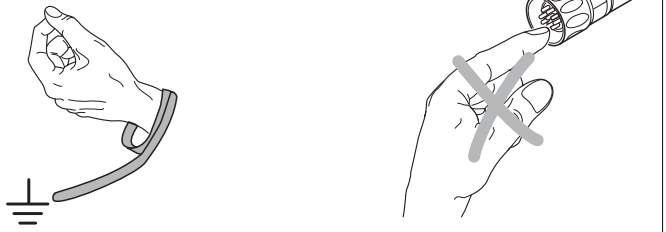
HEIDENHAIN

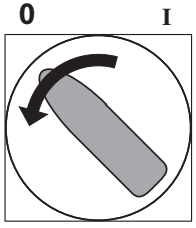
Montageanleitung
Mounting Instructions
Instructions de montage
Istruzioni di montaggio
Instrucciones de montaje

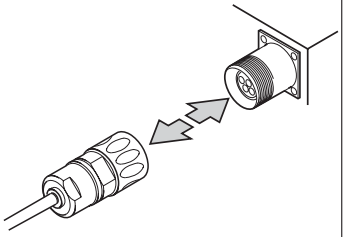
LS 477
LS 487

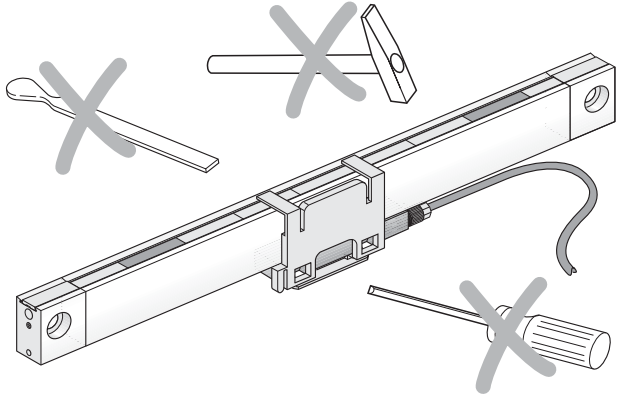
7/2004

DIN EN 100 015 – 1
CECC 00015 – 1

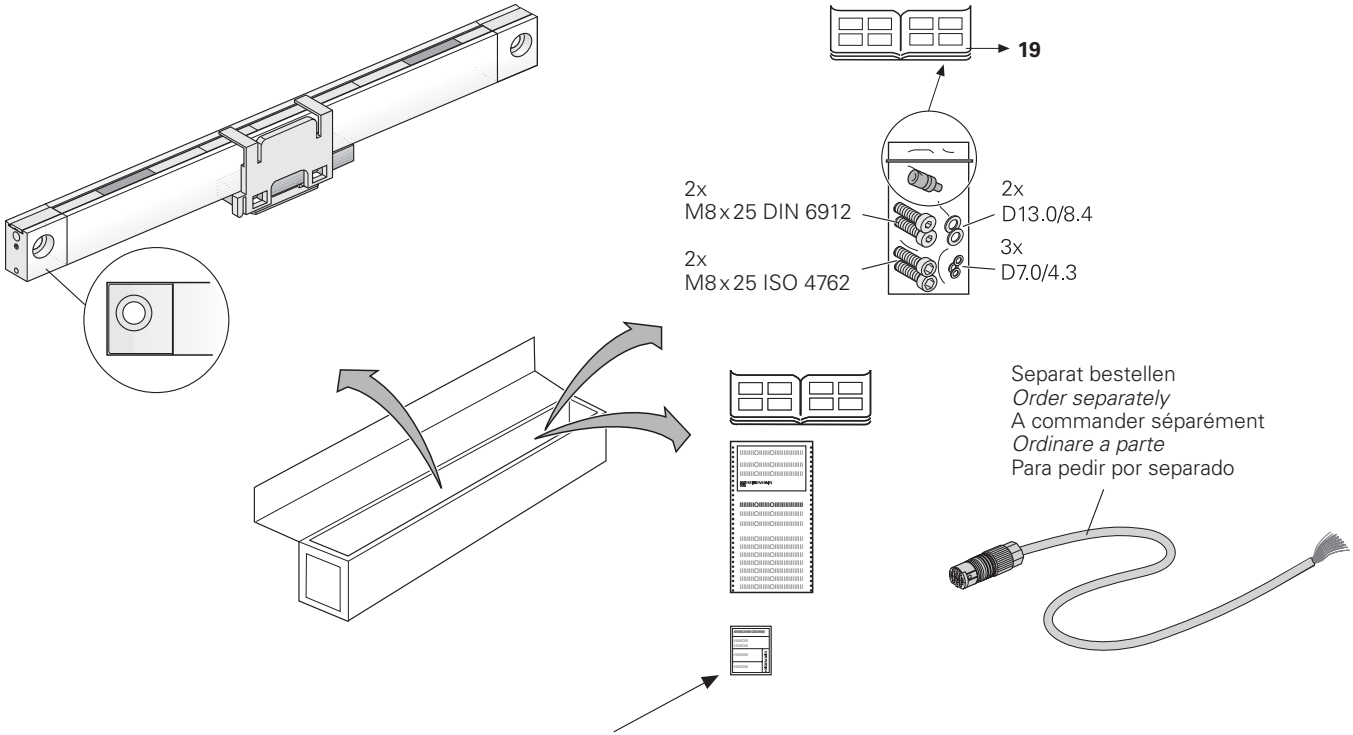




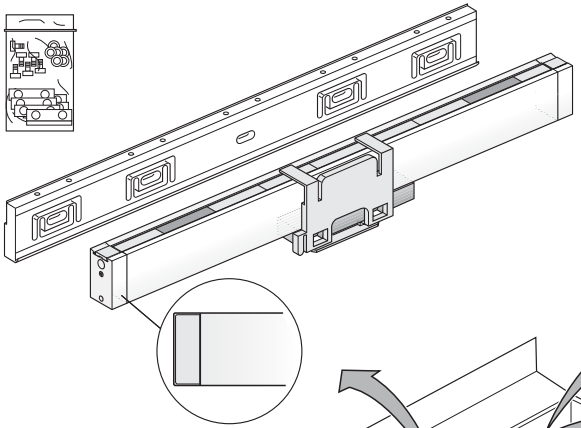


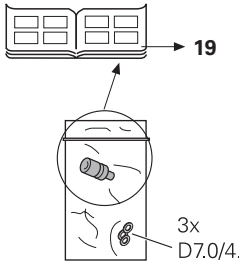


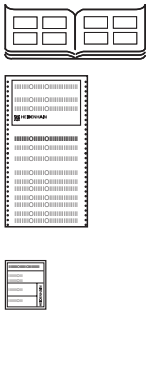
Maße in mm
Dimensions in mm
Cotes en mm
Dimensioni in mm
Dimensiones en mm



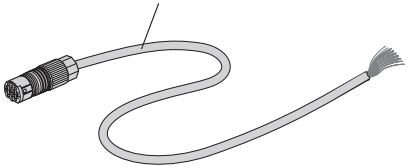
Bei Montage bitte Geräteschild-Aufkleber anbringen (Schaltschrank, Maschinen-Handbuch usw.)
Apply the encoder ID label to an appropriate surface, e.g. the electrical cabinet or machine manual
lors du montage, accoler S.V.P. l'étiquette signalétique de l'appareil (armoire électrique, manuel de la machine, etc.)
completato il montaggio, ricordarsi di applicare l'etichetta (manuale della macchina, quadro elettrico)
por favor, durante el montaje, colocar el adhesivo del letrero del aparato (armario eléctrico, modo de empleo de la máquina, etc.)







Separat bestellen
Order separately
A commander séparément
Ordinare a parte
Para pedir por separado



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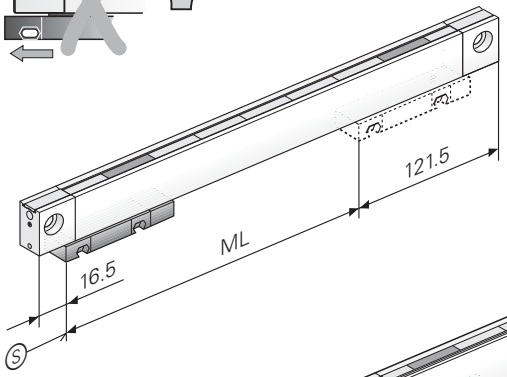
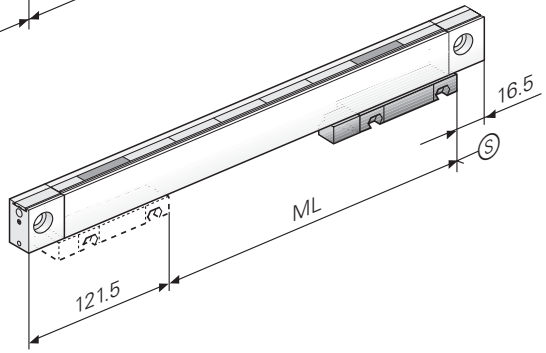
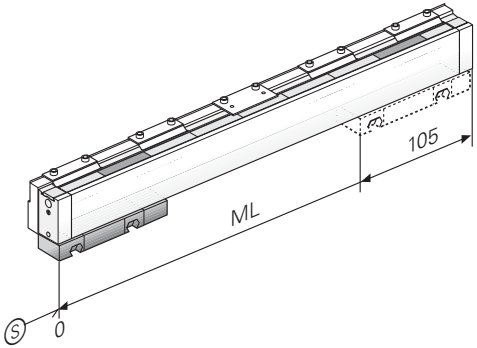
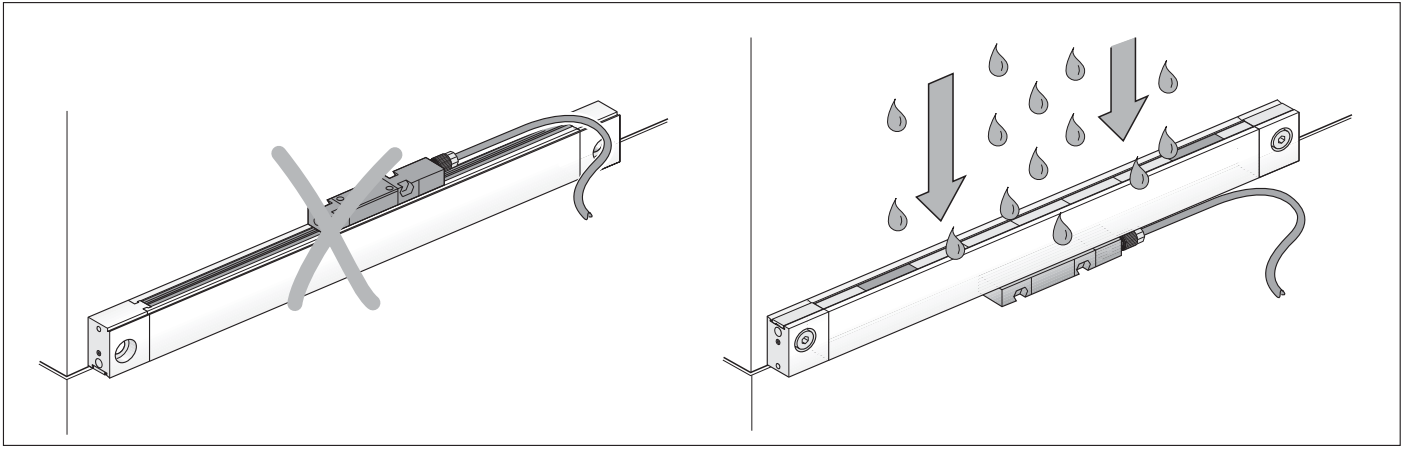


180° gedreht angebaut
Mounted rotated by 180°
Montage avec rotation de 180°
Montaggio ruotato di 180°
Montado girado 180º



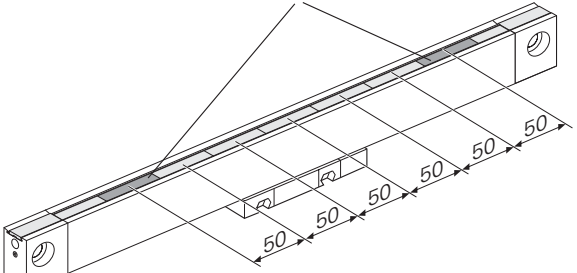


Ⓢ = Beginn der Messlänge ML
Begin. of meas. length ML
début longueur utile ML
inizio lunghezza di misura ML
comienzo longitud útil ML

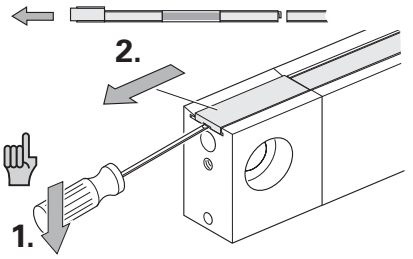


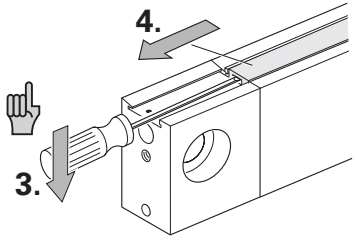
LS 4x7

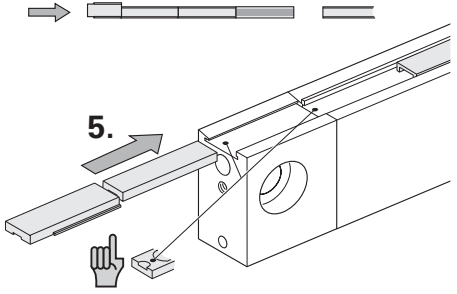
Referenzmarken-Lage
Reference mark
marque de référence
indici di riferimento
marca de referencia



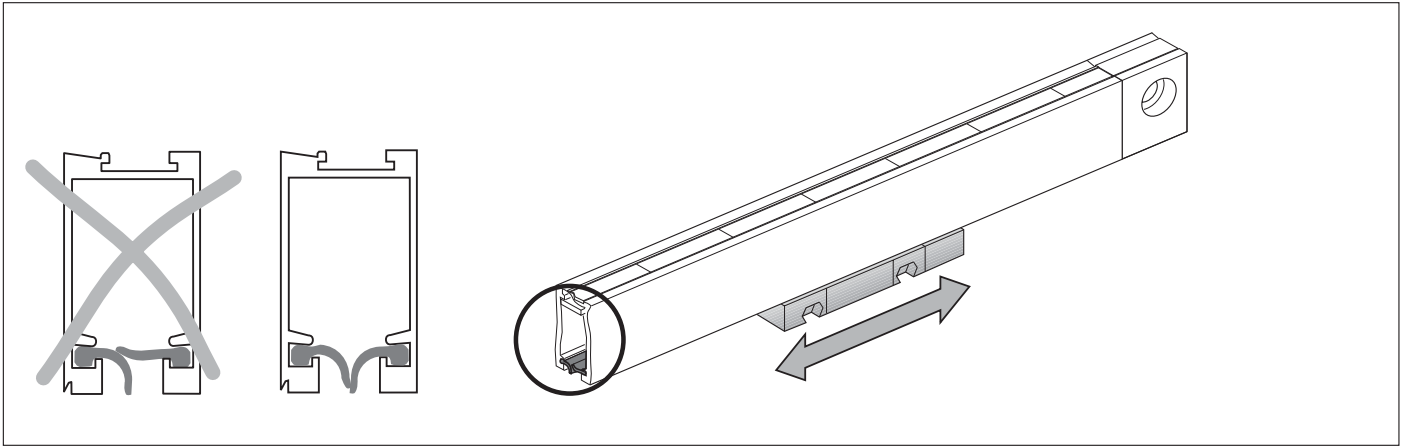
Id.-Nr. 295 795-01 Id.-Nr. 294 336-01



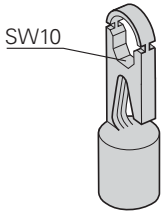


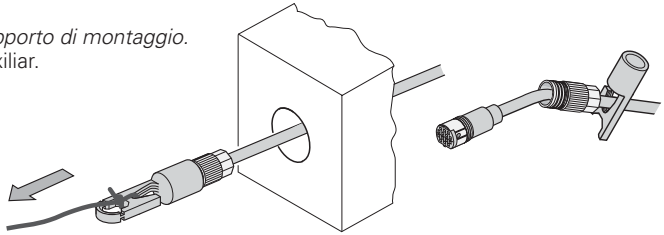


Dichtlippen überprüfen · *Inspect Sealing Lips* · Contrôler les lèvres d`étanchéité · *Controllo delle guarnizioni* · Verificar labios



Die Schutzkappe kann als Werkzeug und Hilfsmittel verwendet werden.
The protective cap can be used as a mounting tool.
Le capot de protection peut être utilisé comme outil et accessoire.
Il coperchio di protezione può essere utilizzato come utensile e come supporto di montaggio.
La tapa protectora se puede utilizar como herramienta y como medio auxiliar.





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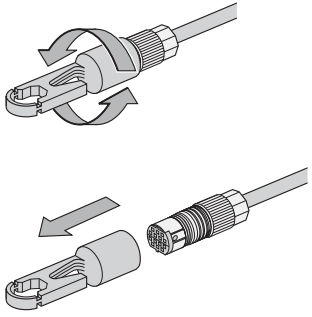

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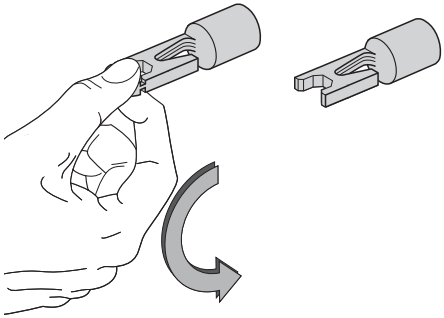

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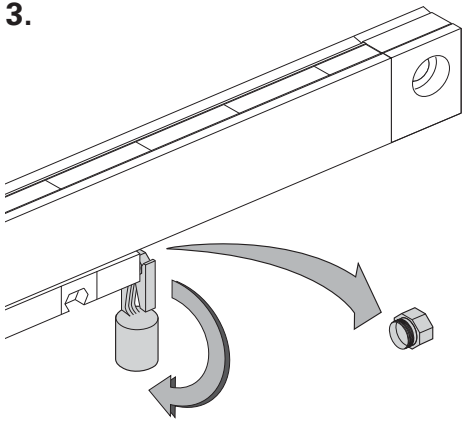

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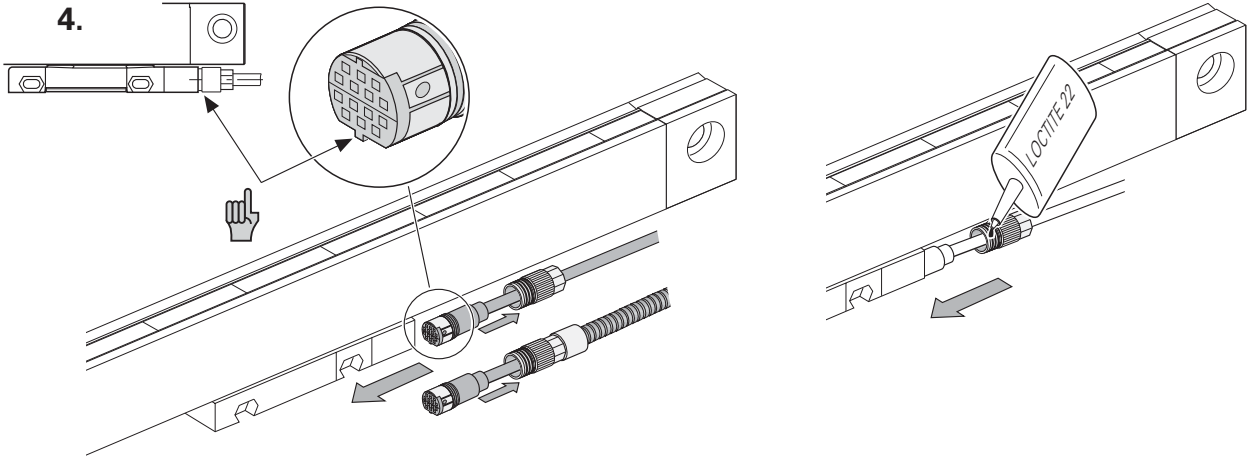

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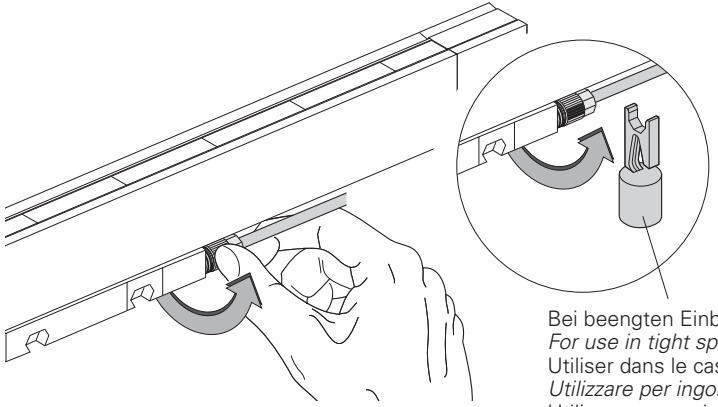
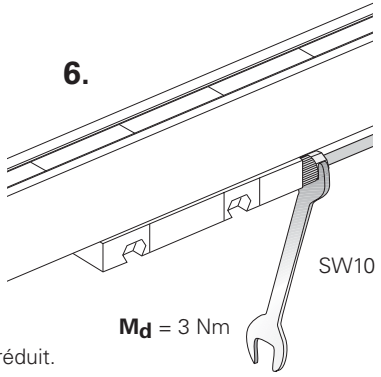


Bei beengten Einbau verwenden.
For use in tight spaces.
Utiliser dans le cas d'un encombrement réduit.
Utilizzare per ingombri limitati.
Utilizar en espacios de montaje reducidos.

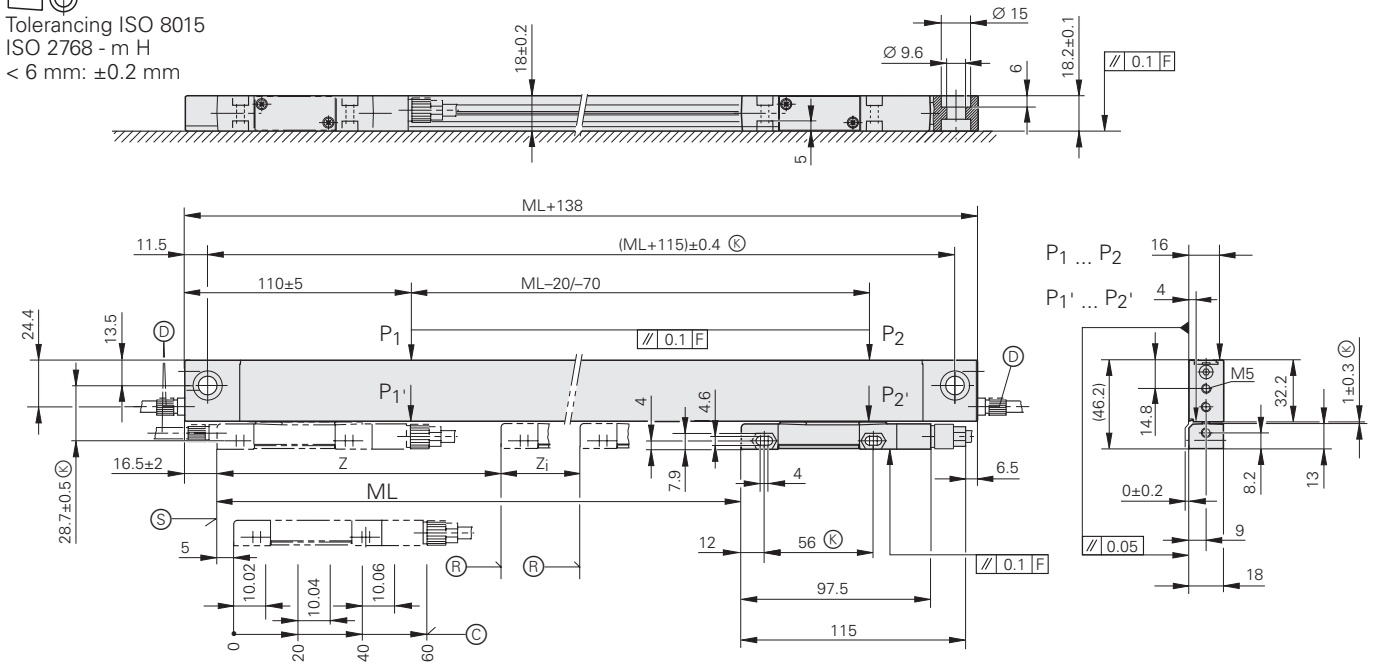
6.



M_d = 3 Nm

mm

Tolerancing ISO 8015
ISO 2768 - m H
< 6 mm: ±0.2 mm



ML 70 ... 1020	ML 1140 ... 1240
z = 35 mm	z = 45 mm
z_i = ML – 70 mm	z_i = ML – 90 mm

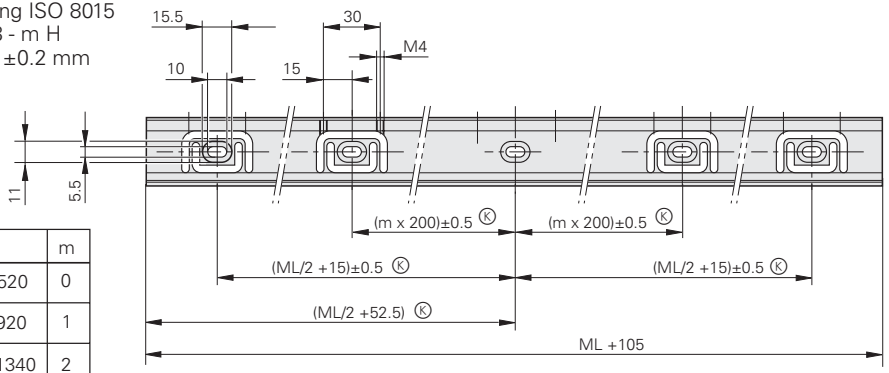
P = Messpunkte zum Ausrichten
Gauging points for alignment
points de mesure pour dé gauchissage
punti di misura per allineamento
puntos medición alineamiento

Ⓢ = Beginn der Messlänge ML
Begin. of meas. length ML
début longueur utile ML
inizio lunghezza di misura ML
comienzo longitud útil ML

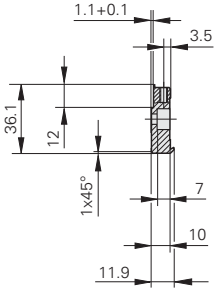
Ⓡ = Referenzmarken-Lage
Ⓒ *Reference mark*
marque de référence
indici di riferimento
marca de referencia

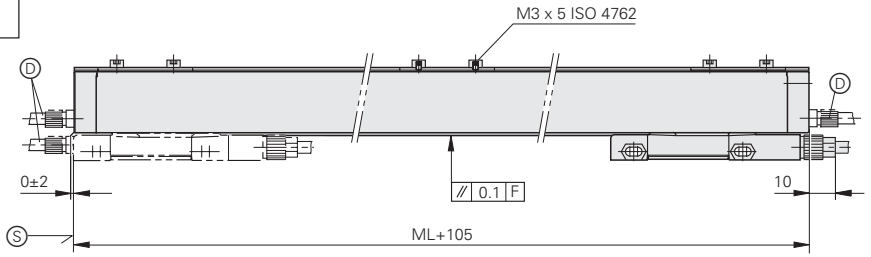
mm

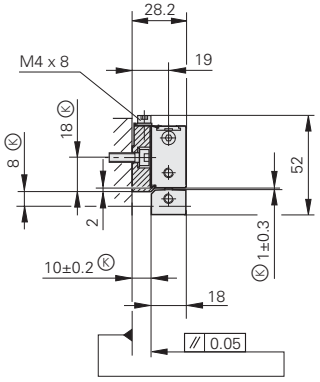
Tolerancing ISO 8015
ISO 2768 - m H
< 6 mm: ±0.2 mm



ML	m
70 ... 520	0
570 ... 920	1
1020 ... 1340	2
1440 ... 1740	3
1840 ... 2040	4



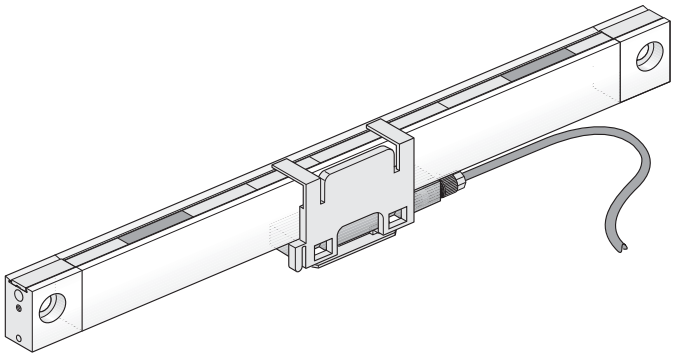


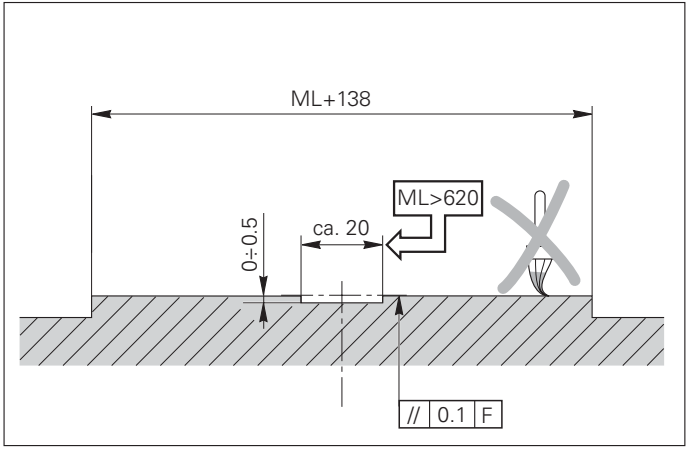


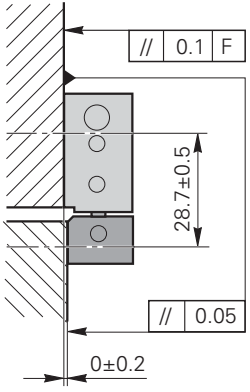
Ⓚ = Kundenseitige Anschlussmaße
Required mating dimensions
conditions requises pour le montage
dimensioni di collegamento lato cliente
cotas de montaje requeridas

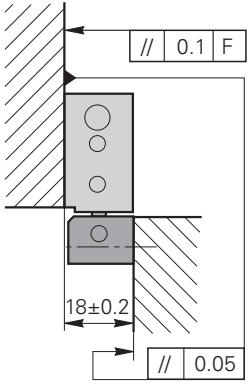
F = Maschinenführung
Machine guideway
guidage de la machine
guida della macchina
guía de la máquina

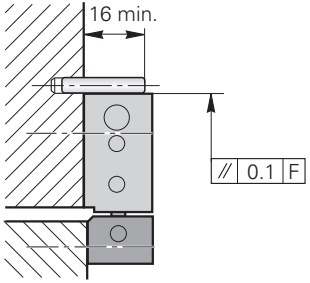
Ⓓ = Druckluftanschluss
Compressed air inlet
raccordement d´air comprimé
ingresso per pressurizzazione
conexión de aire comprimido



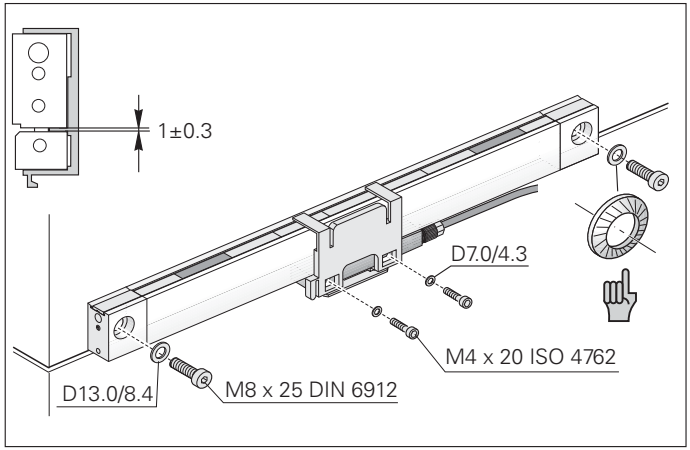


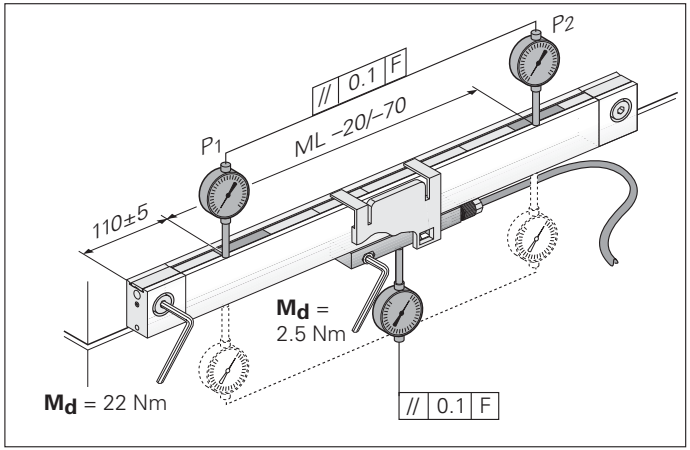


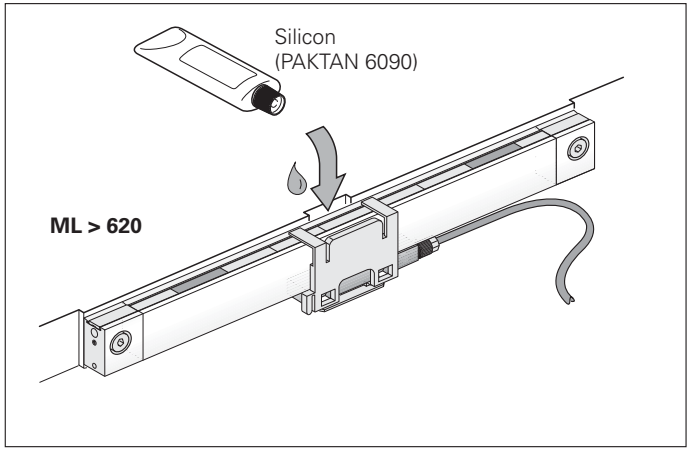


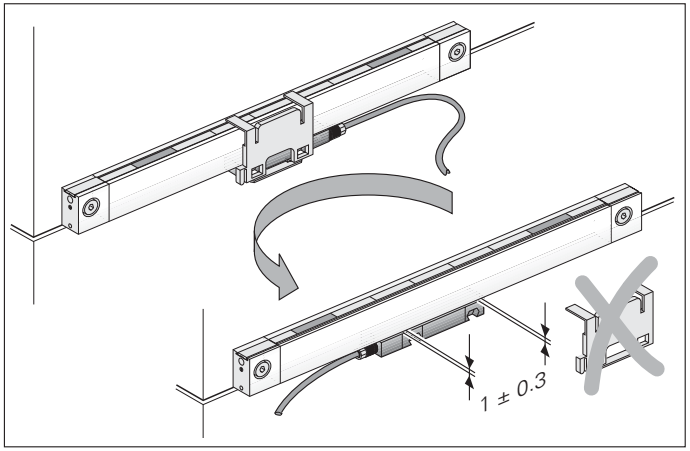


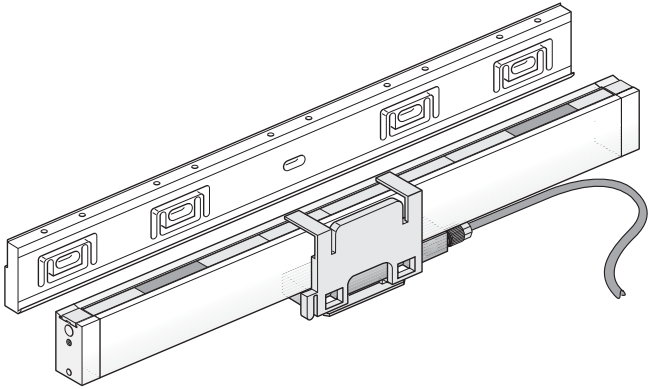
weitere Anbaumöglichkeit mit Anschlagstifte
Additional mounting option with stop pins
autre possibilité de montage avec goupilles d'arrêt
altra possibilità di montaggio con permo di battuta
otra posibilidad de montaje con espigas de ajuste

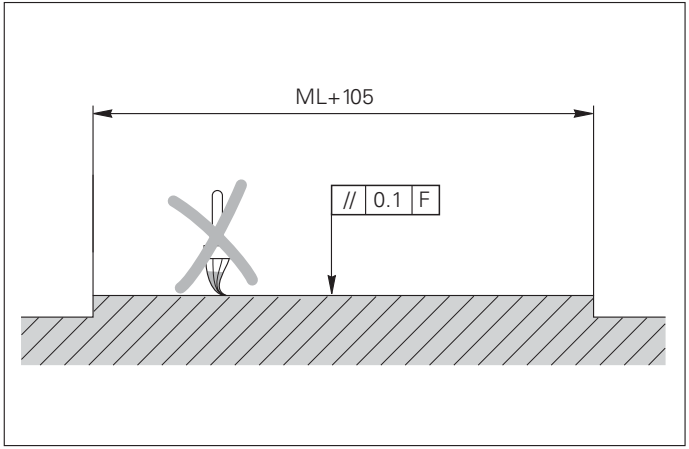

1±0.3
D7.0/4.3
M4 x 20 ISO 4762
D13.0/8.4
M8 x 25 DIN 6912

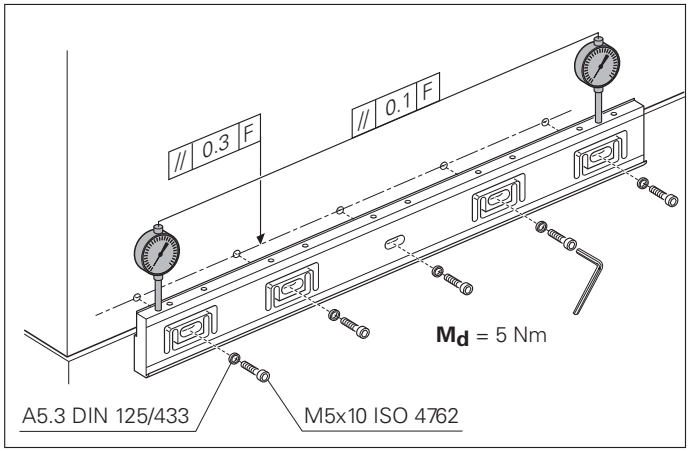

P2
// 0.1 F
P1
ML –20/–70
110±5
Md =
2.5 Nm
Md = 22 Nm
// 0.1 F

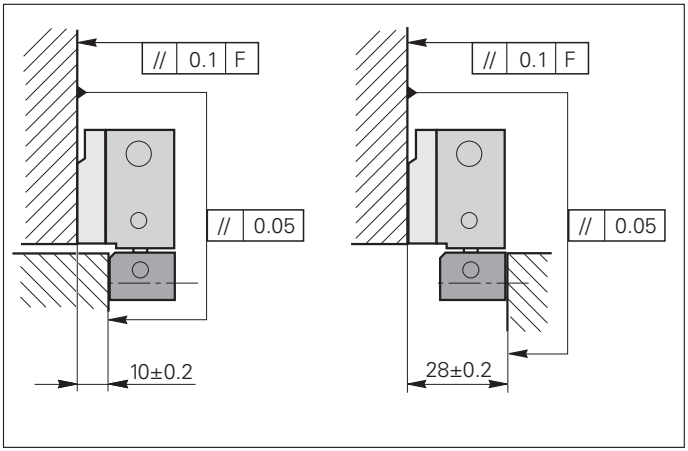

Silicon
(PAKTAN 6090)
ML > 620

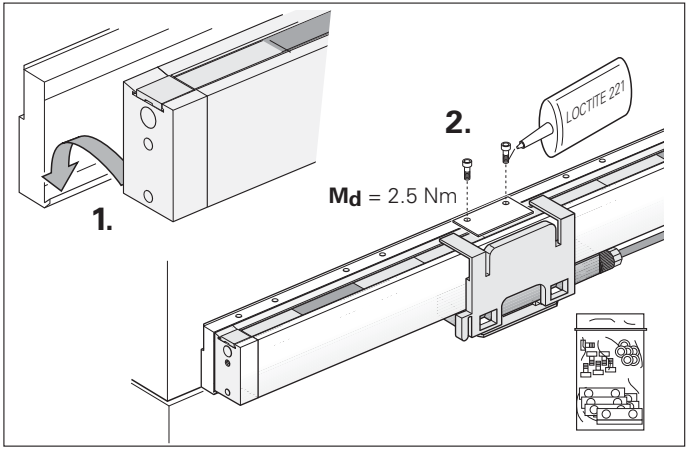

1 ± 0.3

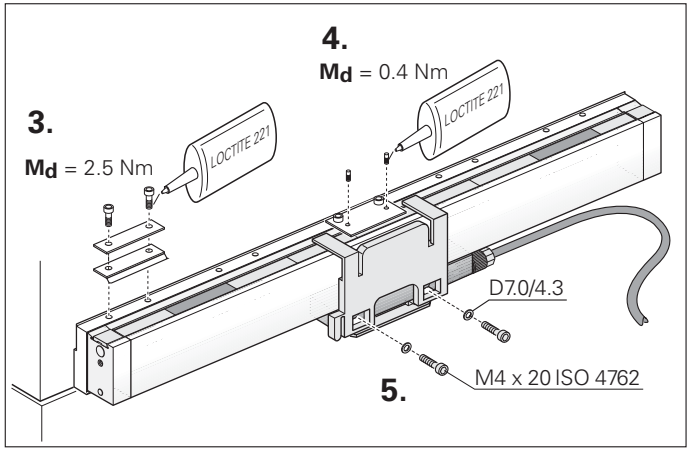


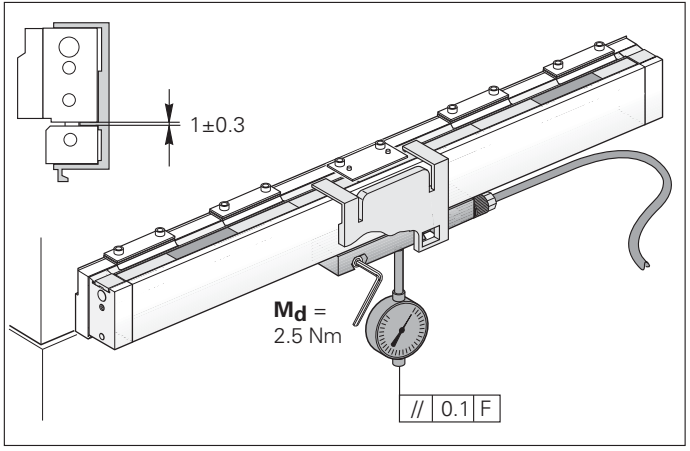

ML+105
// 0.1 F

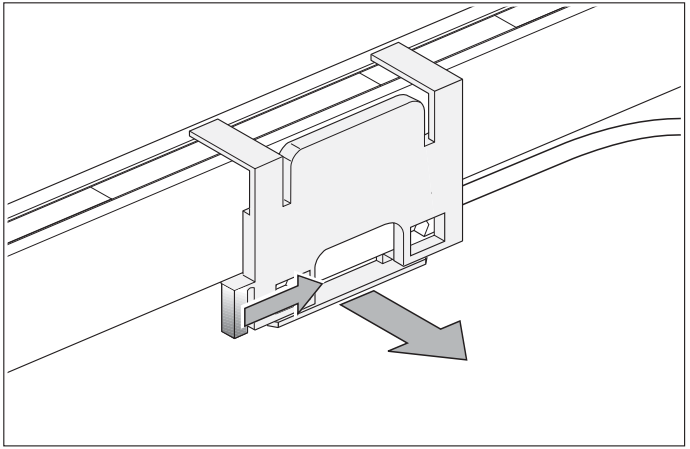

// 0.3 F
// 0.1 F
M_d = 5 Nm
A5.3 DIN 125/433
M5x10 ISO 4762

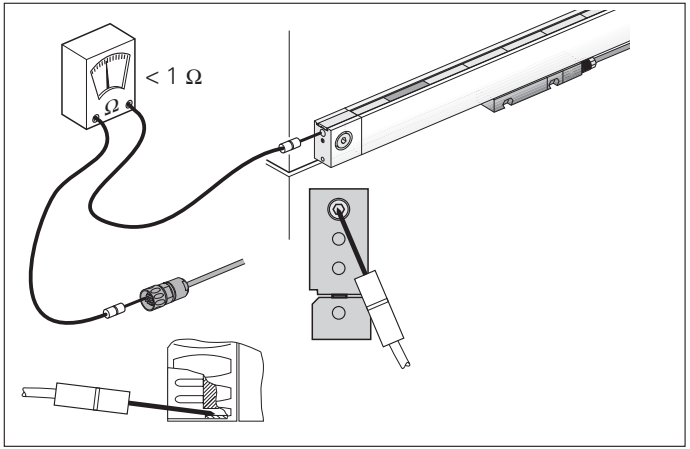

// 0.1 F
// 0.05
10±0.2
// 0.1 F
// 0.05
28±0.2


1.
2.
M_d = 2.5 Nm
LOCTITE 221

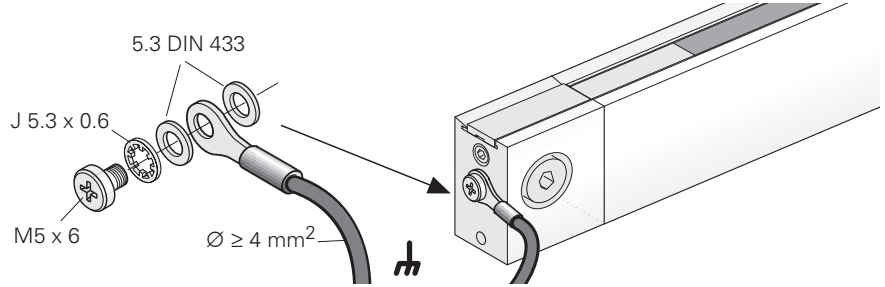

3.
M_d = 2.5 Nm
LOCTITE 221
4.
M_d = 0.4 Nm
LOCTITE 221
D7.0/4.3
5.
M4 x 20 ISO 4762

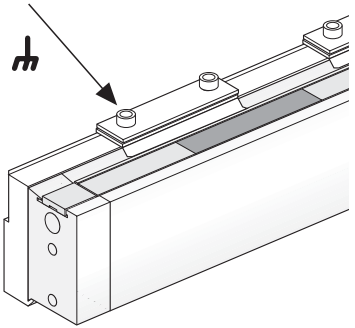

1±0.3
M_d =
2.5 Nm
// 0.1 F

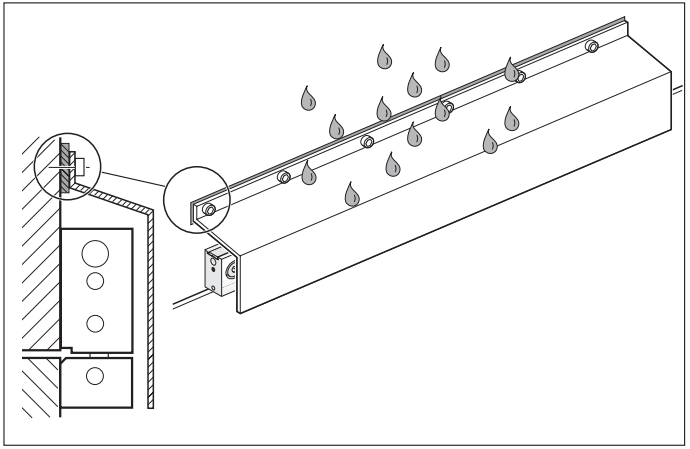


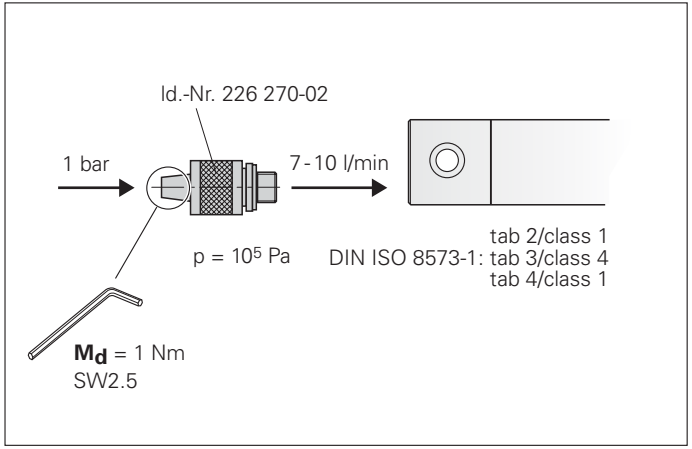


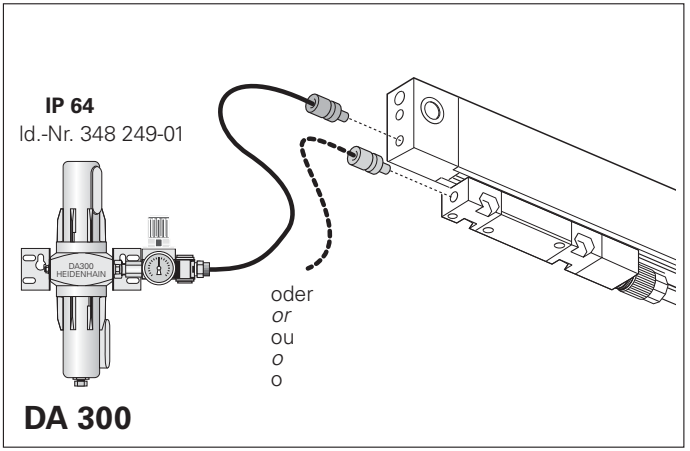
Bei Erdungsproblemen zusätzlich Endstück oder Montageschiene erden!
If grounding problems occur, ground also the end piece or mounting spar!
En cas de problèmes de mise à la terre, mettre aussi l'embout ou le rail de montage à la terre!
Nel caso di problemi di messa a terra, mettere a terra anche il blocchetto terminale o la guida di montaggio!
¡En caso de problemas de tierras, poner a tierra adicionalmente la pieza final o la guía de montaje!

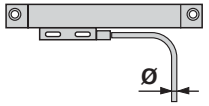
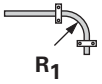
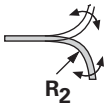


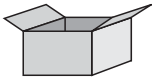




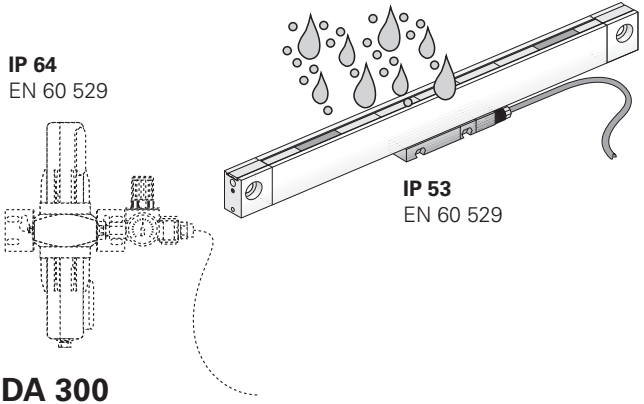

Id.-Nr. 226 270-02
1 bar
7 - 10 l/min
p = 10^5 Pa
DIN ISO 8573-1: tab 2/class 1
tab 3/class 4
tab 4/class 1
M_d = 1 Nm
SW2.5


IP 64
Id.-Nr. 348 249-01
oder
or
ou
o
o
DA 300

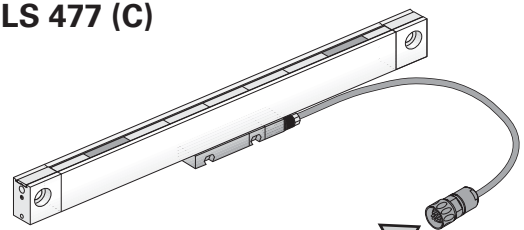
		
Ø 6 mm	$R_1 \geq 20$ mm	$R_2 \geq 75$ mm
Ø 10 mm	$R_1 \geq 35$ mm	$R_2 \geq 75$ mm
Ø 8 mm	$R_1 \geq 40$ mm	$R_2 \geq 100$ mm



–20 ... 70 °C
(– 4 ... 158 °F)



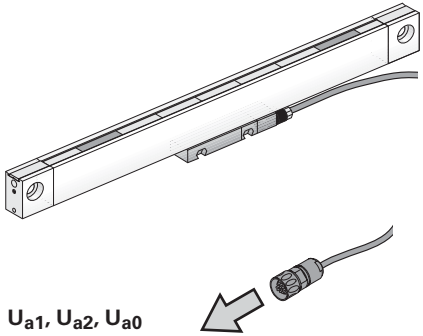
LS 477 (C)



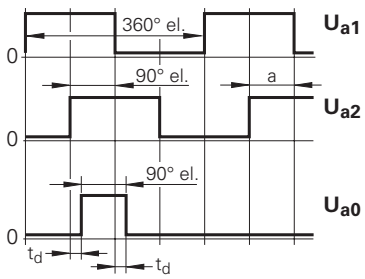
U_P = 5 V ± 5 %
(max. 140 mA)

EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411(PELV/SELV)

(siehe, *see,* voir, *vedi,* véase HEIDENHAIN D 231 929)

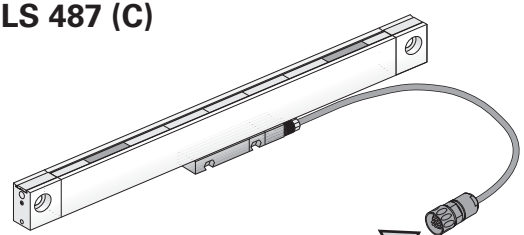


U_{a1}, U_{a2}, U_{a0}
$\overline{U_{a1}}$, $\overline{U_{a2}}$, $\overline{U_{a0}}$, $\overline{U_{aS}}$



$|t_d| \leq 0.1$ µs $a \geq 0.5$ µs

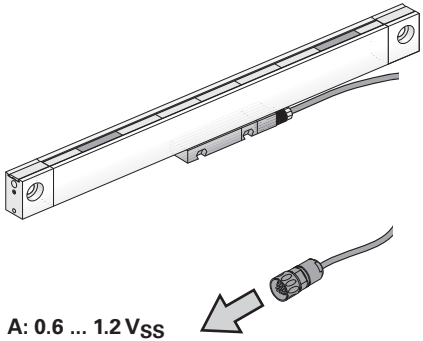
LS 487 (C)



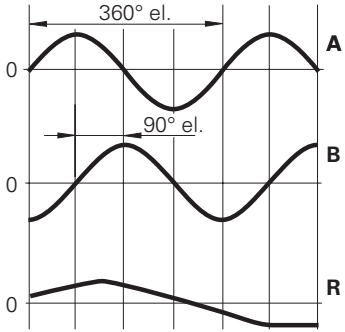
U_P = 5 V ± 5 %
(max. 150 mA)

EN 50 178/4.98; 5.2.9.5
IEC 364-4-41: 1992; 411(PELV/SELV)

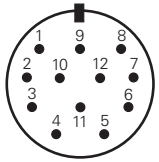
(siehe, *see,* voir, *vedi,* véase HEIDENHAIN D 231 929)

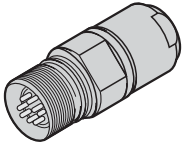


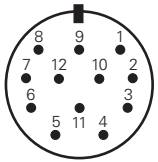
A: 0.6 ... 1.2 V_{SS}
B: 0.6 ... 1.2 V_{SS}
R: 0.2 ... 0.85 V

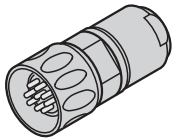


LS 477 (C)



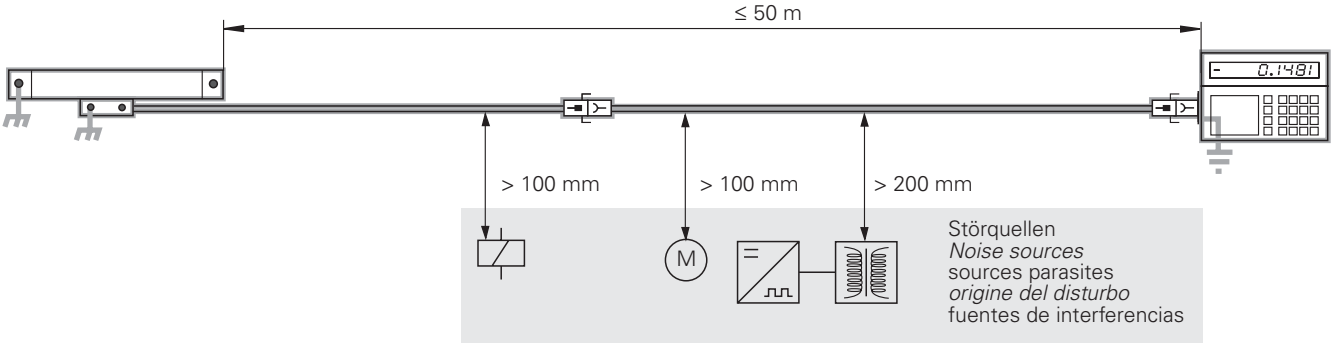




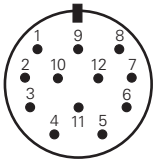


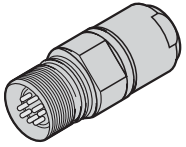
Schirm auf Gehäuse
Shield on housing
blindage sur boîtier
schermo sulla carcassa
blindaje a carcasa

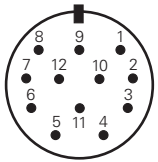
5	6	8	1	3	4	12	10	2	11	7	/
U_{a1}	**$\overline{U_{a1}}$**	**U_{a2}**	**$\overline{U_{a2}}$**	**U_{a0}**	**$\overline{U_{a0}}$**	**5 V U_P**	**0 V U_N**	**5 V sensor**	**0 V sensor**	**$\overline{U_{aS}}$**	**/**
braun *brown* brun *marrone* marrón	grün *green* vert *verde* verde	grau *gray* gris *grigio* gris	rosa *pink* rose *rosa* rosa	rot *red* rouge *rosso* rojo	schwarz *black* noir *nero* negro	braun/grün *brown/green* brun/vert *marrone/verde* marron/verde	weiß/grün *white/green* blanc/vert *bianco/verde* blanco/verde	blau *blue* bleu *azzurro* azul	weiß *white* blanc *bianco* blanco	violett *violet* violet *viola* violeta	gelb *yellow* jaune *giallo* amarillo

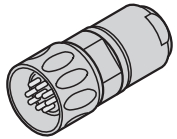


LS 487 (C)



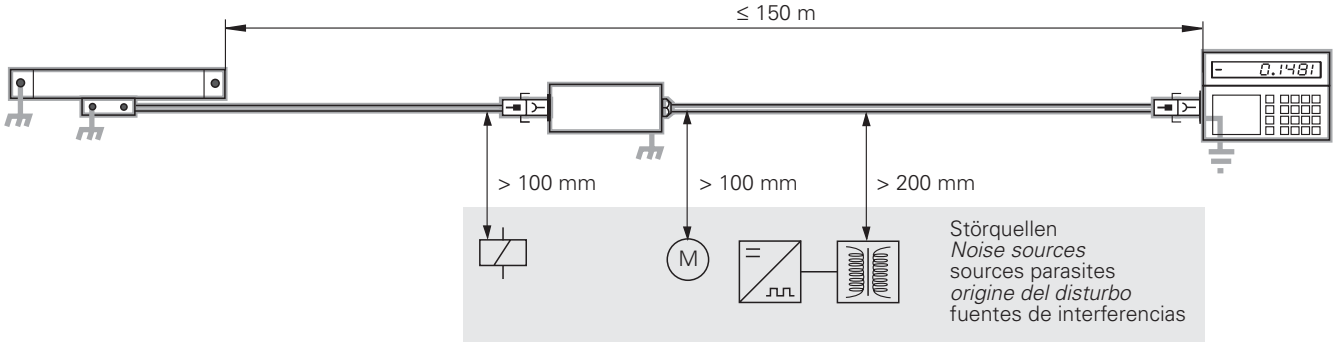






Schirm auf Gehäuse
Shield on housing
blindage sur boîtier
schermo sulla carcassa
blindaje a carcasa

5	6	8	1	3	4	12	10	2	11	7	/
A		**B**		**R**		**5 V U_P**	**0 V U_N**	**5 V sensor**	**0 V sensor**	**/**	**/**
+	–	+	–	+	–						
braun *brown* brun *marrone* marrón	grün *green* vert *verde* verde	grau *gray* gris *grigio* gris	rosa *pink* rose *rosa* rosa	rot *red* rouge *rosso* rojo	schwarz *black* noir *nero* negro	braun/grün *brown/green* brun/vert *marrone/verde* marron/verde	weiß/grün *white/green* blanc/vert *bianco/verde* blanco/verde	blau *blue* bleu *azzurro* azul	weiß *white* blanc *bianco* blanco	violett *violet* violet *viola* violeta	gelb *yellow* jaune *giallo* amarillo



HEIDENHAIN

DR. JOHANNES HEIDENHAIN GmbH
Dr.-Johannes-Heidenhain-Straße 5
83301 Traunreut, Germany
☎ +49 (8669) 31-0
FAX +49 (8669) 5061
e-mail: info@heidenhain.de

Technical support FAX +49 (8669) 31-1000
Measuring systems ☎ +49 (8669) 31-3104
e-mail: service.ms-support@heidenhain.de
TNC support ☎ +49 (8669) 31-3101
e-mail: service.nc-support@heidenhain.de
NC programming ☎ +49 (8669) 31-3103
e-mail: service.nc-pgm@heidenhain.de
PLC programming ☎ +49 (8669) 31-3102
e-mail: service.plc@heidenhain.de
Lathe controls ☎ +49 (711) 952803-0
e-mail: service.hsf@heidenhain.de

www.heidenhain.de

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